

Appln No. 10/754,009
Amdt date January 19, 2007
Reply to Office action of August 22, 2006

Amendments to the Specification:

Please replace the paragraph beginning on page 13, line 25 with the following rewritten paragraph:

If the interrogating signal is no longer received (No), then it is determined whether a predetermined time, for example, one second, has elapsed from the output of the response signal (S6). If the answer is No, the process returns to [[S6]]S5 to determine whether the interrogating signal is once again received. If the interrogating signal is no longer received after one second has elapsed in S6 (Yes), this means that the response signal was output and the codes were found to match each other, the remote engine starter 6 outputs the starter ON signal to the starter motor 10, the immobilizer 4, and the engine controller 5 for a predetermined length of time, for example, two seconds (S7). Next, it is determined whether a predetermined time, for example, four seconds, has elapsed from the output of the starter signal (S8). If four seconds have elapsed (Yes), it is determined whether the engine has started (S9). If the engine has started (Yes), the engine start process is terminated. Here, the determination is made by checking the output of an alternator L terminal [[11]]13 because the output of this terminal being input to the remote engine starter 6 should go to "H" when the engine has started.

Please replace the paragraph beginning on page 15, line 9 with the following rewritten paragraph:

The immobilizer 4 judges whether the unique key code KC matches the stored key code 43 or 44 (S5). If they match (Yes), the engine start permitting section of the immobilizer 4 outputs the permit signal to the engine controller 5 (S6), and the determination process is terminated (S9). On the other hand, if the key codes do not match in S5 (No), +1 is added to the number of mismatches, (Cn-1), that occurred up to the previous cycle of the routine (S7), and it is determined whether the accumulated number of mismatches, Cn, exceeds a predetermined value, for example, 10 (S8). Before the determination, a counter is initialized (S7-1) between step S2 and S3. If it exceeds 10 (Yes), the determination process is terminated (S9), and the

engine will not be started. On the other hand, if the answer in S8 is No, the process returns to S3 where the activation signal is output once again. In this way, the determination as to whether the codes match or not is performed repeatedly and, if they still do not match after trying more than the predetermined number of times, the engine will not be started.

Please replace the paragraph beginning on page 15, line 28 through page 16, line 25 with the following rewritten paragraph:

If the key insertion signal is not output in S2 (No), then it is determined whether the IG ON signal, etc. are output (S10). If they are output (Yes), the remote engine starter 6 operates as shown in Fig. 7A; that is, as the IG ON signal is output to the immobilizer 4, it is determined whether or not the remote engine starter verifying code for the remote engine starter 6 is preregistered in the immobilizer 4 (S11). If it is preregistered (Yes), the interrogating signal outputting section of the immobilizer 4 outputs the interrogating signal QS to the remote engine starter 6 (S12), whereupon the remote engine starter 6 outputs a response signal RS which is received by the immobilizer 4 (S13). The immobilizer 4 judges whether the "remote engine starter code" preregistered in the remote engine starter and contained in the received response signal matches the "remote engine starter verifying code" stored in the immobilizer 4 (S14) and, if they match (Yes), the immobilizer 4 outputs the permit signal to the engine controller 5 (S6), and the determination process is terminated (S9). On the other hand, if the codes do not match in S14 (No), +1 is added to the number of mismatches, (Cn-1), that occurred up to the previous cycle of the routine (S15), and it is determined whether the accumulated number of mismatches, Cn, exceeds a predetermined number, for example, 10 (S16). Before the determination, a counter is initialized (S15-1) between step S11 and S12. If it exceeds 10 (Yes), the determination process is terminated (S9), and the engine will not be started. On the other hand, if the answer in S16 is No, the process returns to S12 where the interrogating signal is output once again. In this case also, the determination as to whether the codes match or not is performed repeatedly and, if they still do not match after trying more than the predetermined number of times, the engine will not be started.

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Please replace the paragraph beginning on page 17, line 20 with the following rewritten paragraph:

Next, it is determined whether this code is received by the immobilizer 4 (S4). If the key code KC is received (Yes), the immobilizer 4 judges whether the received key code KC matches the stored key code 43 or 44 (see Fig. 2) (S5). If they match (Yes), the immobilizer 4 outputs the permit signal to the engine controller 5 (S6), and the determination process is terminated (S9). On the other hand, if the codes do not match in S5 (No), +1 is added to the number of mismatches, (Cn-1), that occurred up to the previous cycle of the routine (S7), and it is determined whether the accumulated number of mismatches, Cn, exceeds a predetermined value, for example, 10 (S8). Before the determination, a counter is initialized (S7/16) between step S1 and S2. If it exceeds 10 (Yes), the determination process is terminated (S9), and the engine will not be started. On the other hand, if the answer in S8 is No, the process returns to S3 where the activation signal is output once again. In this way, the determination as to whether the codes match or not is performed repeatedly and, if they still do not match after trying more than the predetermined number of times, the engine will not be started.

Please replace the paragraph beginning on page 18, line 34 through page 19, line 19 with the following rewritten paragraph:

The immobilizer 4 judges whether the "remote engine starter code" 61 preregistered in the remote engine starter and contained in the received response signal matches the "remote engine starter verifying code" 45 preregistered in the immobilizer 4 (S15) and, if they match (Yes), the immobilizer 4 outputs the permit signal to the engine controller 5 (S6), and the determination process is terminated (S9). On the other hand, if the codes do not match in S15 (No), +1 is added to the number of mismatches, (Cn-1), that occurred up to the previous cycle of the routine (S16), and it is determined whether the accumulated number of mismatches, Cn, exceeds a predetermined number, for example, 10 (S17). Before the determination, a counter is initialized (S7/16) between steps S1 and S2. If it exceeds 10 (Yes), the determination process is terminated (S9), and the engine will not be started. If the answer in S17 is No, on the other hand,

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the process returns to S13 where the interrogating signal is output once again. In this case also, the determination as to whether the codes match or not is performed repeatedly and, if they still do not match after trying more than the predetermined number of times, the engine will not be started. If No in S10, the process is terminated immediately.

Please replace the paragraph beginning on page 20, line 34 through page 21, line 13 with the following rewritten paragraph:

On the other hand, if the codes do not match in S51 (No), +1 is added to the number of mismatches, (Cn-1), that occurred up to the previous cycle of the routine (S53), and it is determined whether the accumulated number of mismatches, Cn, exceeds a predetermined number, for example, 10 (S54). Before the determination, a counter is initialized (S53/63) between S4 and S5. If it exceeds 10 (Yes), the determination process is terminated (S55), and the engine will not be started. If the answer in S54 is No, on the other hand, the activation signal is output (S56). Then, the process proceeds to S5, and if the key code is received (Yes), the process proceeds to S51 as in the previous cycle. In this way, the determination as to whether the codes match or not is performed repeatedly and, if they still do not match after trying more than the predetermined number of times (Yes in S54), the determination process is terminated, and the engine will not be started.